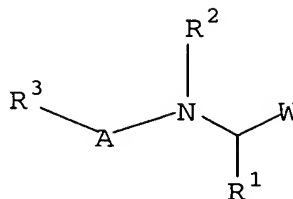


5 What we claim is:

1. A compound of Formula (I):



(I)

10 or a stereoisomer or a pharmaceutically acceptable salt form or prodrug thereof, wherein:

W is selected from the group:

- B(Y¹)(Y²),
- 15 -C(=O)C(=O)-Q,
- C(=O)C(=O)NH-Q,
- C(=O)C(=O)-O-Q,
- C(=O)CF₂C(=O)NH-Q;
- C(=O)CF₃,
- 20 -C(=O)CF₂CF₃, and
- C(=O)H;

Y¹ and Y² are independently selected from:

- a) -OH,
- 25 b) -F,
- c) -NR⁴R⁵,
- d) C₁-C₈ alkoxy, and

when taken together with B, Y¹ and Y² form:

- e) a cyclic boronic ester where said cyclic boronic ester contains from 2 to 20 carbon atoms, and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O;
- 30 f) a cyclic boronic amide where said cyclic boronic amide contains from 2 to 20 carbon atoms and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O; or
- 35

- 5 g) a cyclic boronic amide-ester where said cyclic boronic amide-ester contains from 2 to 20 carbon atoms and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O;
- 10 Q is selected from $-(CR^6R^{6c})_p-Q^1$, $-(CR^6R^{6c})_p-Q^2$, C_2-C_4 alkenyl substituted with Q^1 , C_2-C_4 alkynyl substituted with Q^1 , and an amino acid residue;
- 15 p is 1, 2, 3 or 4;
- Q^1 is selected from the group:
-CO₂R⁷, -SO₂R⁷, -SO₃R⁷, -P(O)₂R⁷, -P(O)₃R⁷,
aryl substituted with 0-4 Q^{1a} , and
20 5-6 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-6 membered heterocyclic ring system is substituted with 0-4
25 Q^{1a} ;
- Q^{1a} is H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
-CO₂R⁸, -C(=O)NR⁸R⁹, -NHC(=O)R⁸, -SO₂R⁸, -SO₂NR⁸R⁹,
-NR⁸R⁹, -OR⁸, -SR⁸, C₁-C₄ alkyl, C₁-C₄ haloalkyl, or
30 C₁-C₄ haloalkoxy;
- Q^2 is -X¹-NR¹⁰-Z, -NR¹⁰-X²-Z, or -X¹-NR¹⁰-X²-Z;
- X^1 and X^2 are independently selected from: -C(=O)-, -S-,
35 -S(=O)-, -S(=O)₂-, -P(O)-, -P(O)₂-, and -P(O)₃-;
- Z is C₁-C₄ haloalkyl,
C₁-C₄ alkyl substituted with 0-3 Z^a ,
C₂-C₄ alkenyl substituted with 0-3 Z^a ,

- 5 C₂-C₄ alkynyl substituted with 0-3 Z^a,
C₃-C₁₀ cycloalkyl substituted with 0-5 Z^b,
C₃-C₁₀ carbocycle substituted with 0-5 Z^b,
6-10 membered aryl substituted with 0-5 Z^b, or
5-10 membered heterocyclic ring system consisting of
10 carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic ring system is substituted with 0-4
Z^b;
- 15 Z^a is H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
-CO₂R⁸, -C(=O)NR⁸R⁹, -NHC(=O)R⁸, -NR⁸R⁹, -OR⁸, -SR⁸,
-S(=O)R⁸, -SO₂R⁸, -SO₂NR⁸R⁹, C₁-C₄ alkyl,
C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy,
- 20 C₃-C₇ cycloalkyl substituted with 0-5 Z^b,
C₃-C₁₀ carbocycle substituted with 0-5 Z^b,
6-10 membered aryl substituted with 0-5 Z^b, or
5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
25 group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic ring system is substituted with 0-4
Z^b;
- 30 Z^b is H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
-CO₂R⁸, -C(=O)NR⁸R⁹, -NHC(=O)R⁸, -NR⁸R⁹, -OR⁸, -SR⁸,
-S(=O)R⁸, -SO₂R⁸, -SO₂NR⁸R⁹, C₁-C₄ alkyl, C₁-C₄
haloalkyl, C₁-C₄ haloalkoxy,
C₃-C₇ cycloalkyl substituted with 0-5 Z^c,
- 35 C₃-C₁₀ carbocycle substituted with 0-5 Z^c,
6-10 membered aryl substituted with 0-5 Z^c, or
5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the

140

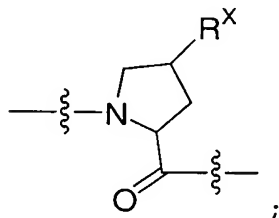
5 group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-10 membered heterocyclic ring system is substituted with 0-4 Z^C ;

10 Z^C is H, F, Cl, Br, I, $-NO_2$, $-CN$, $-NCS$, $-CF_3$, $-OCF_3$, $-CO_2R^8$, $-C(=O)NR^8R^9$, $-NHC(=O)R^8$, $-NR^8R^9$, $-OR^8$, $-SR^8$, $-S(=O)R^8$, $-SO_2R^8$, $-SO_2NR^8R^9$, C_1-C_4 alkyl, C_1-C_4 haloalkyl, or C_1-C_4 haloalkoxy;

15 A is A^2-A^3 , $A^2-A^3-A^4$, $A^2-A^3-A^4-A^5$, $A^2-A^3-A^4-A^5-A^6$, or $A^2-A^3-A^4-A^5-A^6-A^7$;

A^2 is a natural amino acid, a modified amino acid, an unnatural amino acid, or

20



wherein said amino acid is of either D or L configuration;

25 R^X is H, F, Cl, Br, I, $-CF_3$, $-OCF_3$, $-(CH_2)_m-R^{16}-(CH_2)_n-R^{12}$, or $-CO_2R^{12}$;

m and n are independently selected from 0, 1, 2, and 3;

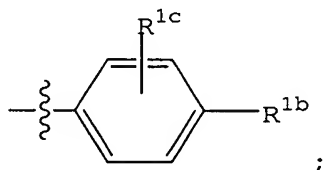
30 A^3 , A^4 , A^5 , A^6 , and A^7 are independently selected from an amino acid residue; wherein said amino acid residue, at each occurrence, is independently selected from a natural amino acid, a modified amino acid, or an unnatural amino acid; wherein said natural, modified
35 or unnatural amino acid is of either D or L configuration;

5

R^1 is $-\text{CH}_2\text{CH}_2-\text{R}^{1a}$, $-\text{CH}_2\text{CH}_2\text{CH}_2-\text{R}^{1a}$, $-\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2-\text{R}^{1a}$,
 $-\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2-\text{R}^{1a}$, $-\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2-\text{R}^{1a}$,
 $-\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$, $-\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$,
 $-\text{CH}_2\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2$, $-\text{CH}_2\text{CH}_2\text{CH}_2\text{C}(\text{CH}_2\text{CH}_3)_2$, or
 $-\text{CH}_2\text{CH}_2\text{CH}_2$ -cyclobutyl;

10

R^{1a} is



15

R^{1b} is selected at each occurrence from the group:
H, C_1 - C_4 alkyl, F, Cl, Br, I, $-\text{OH}$, C_1 - C_4 alkoxy,
phenoxy, benzyloxy, $-\text{SH}$, $-\text{CN}$, $-\text{NO}_2$, $-\text{C}(=\text{O})\text{OR}^{1d}$,
 $-\text{NR}^{1d}\text{R}^{1d}$, $-\text{CF}_3$, $-\text{OCF}_3$, C_3 - C_6 cycloalkyl, and aryl
substituted by 0-3 R^{1c} ;

20

R^{1c} is selected at each occurrence from the group:
methyl, ethyl, Cl, F, Br, I, OH, methoxy, ethoxy, $-\text{CN}$,
 $-\text{NO}_2$, $-\text{C}(=\text{O})\text{OR}^{1d}$, $\text{NR}^{1d}\text{R}^{1d}$, $-\text{CF}_3$, and $-\text{OCF}_3$;

25

R^{1d} is H, C_1 - C_4 alkyl, phenyl or benzyl;

R^2 is H, C_1 - C_4 alkyl, aryl, aryl(C_1 - C_4 alkyl)-, or
 C_3 - C_6 cycloalkyl;

30

R^3 is H, C_1 - C_4 alkyl, aryl, aryl(C_1 - C_4 alkyl)-, $-\text{C}(=\text{O})\text{R}^{11}$,
 $-\text{CO}_2\text{R}^{11}$, $-\text{C}(=\text{O})\text{NHR}^{11}$, $-\text{S}(=\text{O})\text{R}^{11}$, $-\text{S}(=\text{O})_2\text{R}^{11}$, or
an NH_2 -blocking group;

35

R^4 and R^5 , are independently selected from: H, C_1 - C_4 alkyl,
aryl(C_1 - C_4 alkyl)-, and C_3 - C_7 cycloalkyl;

5 R^6 is selected from the group: H, $-\text{CO}_2R^7$, $-\text{NR}^7R^7$, and $\text{C}_1\text{-C}_6$
alkyl substituted with 0-1 R^{6a} ;

R^{6a} is selected from the group: halo, $-\text{NO}_2$, $-\text{CN}$, $-\text{CF}_3$,
 $-\text{CO}_2R^7$, $-\text{NR}^7R^7$, $-\text{OR}^7$, $-\text{SR}^7$, $-\text{C}(=\text{NH})\text{NH}_2$, and aryl
10 substituted with 0-1 R^{6b} ;

R^{6b} is selected from the group: $-\text{CO}_2\text{H}$, $-\text{NH}_2$, $-\text{OH}$, $-\text{SH}$, and
 $-\text{C}(=\text{NH})\text{NH}_2$;

15 R^{6c} is H or $\text{C}_1\text{-C}_4$ alkyl;

R^7 at each occurrence is independently selected from the
group: H, $\text{C}_1\text{-C}_4$ alkyl, aryl, and aryl($\text{C}_1\text{-C}_4$ alkyl)-,
wherein aryl is optionally substituted with 0-3
20 substituents selected from $-\text{CH}_3$, $-\text{NO}_2$, $-\text{CN}$, $-\text{OH}$,
 $-\text{OCH}_3$, $-\text{SO}_2\text{CH}_3$, $-\text{CF}_3$, Cl, Br, I, and F;

alternatively, $-\text{NR}^7R^7$ may optionally form a 5-6 membered
heterocycle consisting of carbon atoms, a nitrogen
25 atom, and optionally a second heteroatom selected from
the group: O, S, and N;

R^8 and R^9 are independently selected from H, $\text{C}_1\text{-C}_4$ alkyl,
aryl, aryl($\text{C}_1\text{-C}_4$ alkyl)-, and $\text{C}_3\text{-C}_7$ cycloalkyl;

30

alternatively, NR^8R^9 may form a 5-6 membered heterocycle
consisting of carbon atoms, a nitrogen atom, and
optionally a second heteroatom selected from the
group: O, S, and N;

35

R^{10} is selected from the group: H,
 $\text{C}_1\text{-C}_4$ alkyl substituted with 0-3 R^{13} ,
 $\text{C}_3\text{-C}_{10}$ carbocycle substituted with 0-3 R^{13} ,
6-10 membered aryl substituted with 0-3 R^{13} , and

5 5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-3
10 R¹³;

R¹¹ is C₁-C₄ alkyl substituted with 0-1 R^{11a},
6-10 membered aryl substituted with 0-2 R^{11b}, or
5-10 membered heterocyclic ring system consisting of
15 carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
R^{11b};

20 R^{11a} is C₁-C₄ alkyl, halogen, -OR¹⁴, -SR¹⁴, -NR¹⁴R¹⁵, aryl,
or a 5-6 membered heterocyclic ring system containing
1, 2 or 3 heteroatoms selected from nitrogen, oxygen
and sulfur;

25 R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH,
-OCF₃, Cl, Br, I, F, =O, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-
C₄ thioalkoxy, aryl, or aryl(C₁-C₄ alkyl)-, wherein
aryl is optionally substituted with 0-3 substituents
30 selected from -CH₃, -NO₂, -CN, -OH, -OCH₃, -SO₂CH₃,
-CF₃, Cl, Br, I, and F;

R¹² is selected from the group: H;
C₁-C₆ alkyl substituted with 0-3 R^{12a};
35 C₂-C₆ alkenyl substituted with 0-3 R^{12a};
C₂-C₆ alkynyl substituted with 0-3 R^{12a};
C₃-C₇ cycloalkyl substituted with 0-3 R^{12a};
C₄-C₁₀ (cycloalkyl-alkyl) substituted with 0-3 R^{12a};
6-10 membered aryl substituted with 0-3 R^{12a}; and

5 5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
10 R^{12a};

R^{12a} is independently selected from the group: C₁-C₆ alkoxy;
lower thioalkyl; sulfonyl; -NO₂; halogen; haloalkyl;
carboxyl; carboxy(lower alkyl); -OR¹⁴; -SR¹⁴; -NR¹⁴R¹⁵;
15 -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵; -S(=O)₂R¹⁴;
C₁-C₆ alkyl substituted with 0-3 R^{12b};
C₂-C₆ alkenyl substituted with 0-3 R^{12b};
C₂-C₆ alkynyl substituted with 0-3 R^{12b};
C₃-C₇ cycloalkyl substituted with 0-3 R^{12b};
20 C₄-C₁₀ (alkylcycloalkyl) substituted with 0-3 R^{12b};
6-10 membered aryl substituted with 0-3 R^{12b}; and
5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
25 unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
R^{12b};

R^{12b} is independently selected from the group: C₁-C₆ alkyl;
30 C₃-C₇ cycloalkyl; C₁-C₆ alkoxy; halogen; -OR¹⁴; -SR¹⁴;
-NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵; -S(=O)₂R¹⁴;
-NO₂; haloalkyl; carboxyl; carboxy(lower alkyl); aryl;
and 5-10 membered heterocyclic ring system consisting
of carbon atoms and 1-4 heteroatoms selected from
35 the group: O, S, and N; optionally saturated,
partially unsaturated or unsaturated; said 5-10
membered heterocyclic ring system is substituted
with C₁-C₆ alkyl;

145

- 5 R^{13} at each occurrence is independently selected from the group: H, $-\text{NO}_2$, $-\text{SO}_2\text{OH}$, $-\text{SO}_2\text{CH}_3$, $-\text{CF}_3$, Cl, Br, I, F, $-\text{NH}_2$, $-\text{NH}(\text{CH}_3)$, $-\text{N}(\text{CH}_3)_2$, $-\text{NH}(\text{CH}_2\text{CH}_3)$, $-\text{N}(\text{CH}_2\text{CH}_3)_2$, and C_1 - C_4 alkyl;
- 10 R^{14} and R^{15} are independently selected from the group: H, C_1 - C_4 alkyl, aryl, aryl(C_1 - C_4 alkyl)-, and C_3 - C_7 cycloalkyl;
- 15 R^{16} is a bond, $-\text{O}-$, $-\text{S}-$ or $-\text{NR}^{17}-$; and
- R^{17} is H, C_1 - C_4 alkyl, aryl, aryl(C_1 - C_4 alkyl)-, or C_3 - C_6 cycloalkyl.
- 20 2. A compound of Claim 1, or a stereoisomer or a pharmaceutically acceptable salt form or prodrug thereof, wherein:
- W is $-\text{B}(\text{Y}^1)(\text{Y}^2)$ or $-\text{C}(=\text{O})\text{C}(=\text{O})\text{NH}-\text{Q}$;
- 25 Y^1 and Y^2 are independently selected from:
- a) $-\text{OH}$,
- b) $-\text{F}$,
- c) $-\text{NR}^4\text{R}^5$,
- d) C_1 - C_8 alkoxy, and
- 30 when taken together with B, Y^1 and Y^2 form:
- e) a cyclic boronic ester where said cyclic boronic ester contains from 2 to 20 carbon atoms, and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O;
- 35 Q is selected from $-(\text{CR}^6\text{R}^{6c})_p-\text{Q}^1$, C_2 - C_4 alkenyl substituted with Q^1 , C_2 - C_4 alkynyl substituted with Q^1 , and an amino acid residue;

5

p is 1, 2 or 3;

Q¹ is selected from the group:

-CO₂R⁷, -SO₂R⁷, -SO₃R⁷,

10

aryl substituted with 0-4 Q^{1a}, and

5-6 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-6 membered heterocyclic ring system is substituted with 0-4 Q^{1a};

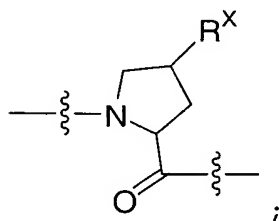
15

Q^{1a} is H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
-CO₂R⁸, -C(=O)NR⁸R⁹, -NHC(=O)R⁸, -SO₂R⁸, -SO₂NR⁸R⁹,
20 -NR⁸R⁹, -OR⁸, -SR⁸, C₁-C₄ alkyl, C₁-C₄ haloalkyl, or
C₁-C₄ haloalkoxy;

A is A²-A³, A²-A³-A⁴, A²-A³-A⁴-A⁵, or A²-A³-A⁴-A⁵-A⁶;

25

A² is a natural amino acid, a modified amino acid, an unnatural amino acid, or



30

wherein said amino acid is of either D or L configuration;

R^X is H or -(CH₂)_m-R¹⁶-(CH₂)_n-R¹²;

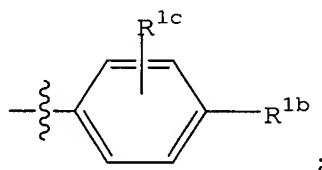
m and n are independently selected from 0, 1, or 2;

35

5 A³, A⁴, A⁵, and A⁶ are independently selected from an amino acid residue wherein said amino acid residue, at each occurrence, is independently selected from a natural amino acid, a modified amino acid, or an unnatural amino acid wherein said natural, modified or unnatural
 10 amino acid is of either D or L configuration;

R¹ is -CH₂CH₂-R^{1a}, -CH₂CH₂CH₂-R^{1a}, -CH₂CH₂CH₂CH₂-R^{1a},
 -CH₂CH₂CH₂CH₂CH₂-R^{1a}, -CH₂CH₂CH₂CH₂CH₂CH₂-R^{1a},
 -CH₂CH₂CH₂CH₂CH₃, -CH₂CH₂CH₂CH₂CH₂CH₃,
 15 -CH₂CH₂CH₂C(CH₃)₂, -CH₂CH₂CH₂C(CH₂CH₃)₂, or
 -CH₂CH₂CH₂-cyclobutyl;

R^{1a} is



20

R^{1b} is selected at each occurrence from the group:
 H, C₁-C₄ alkyl, F, Cl, Br, I, -OH, C₁-C₄ alkoxy,
 phenoxy, benzyloxy, -SH, -CN, -NO₂, -C(=O)OR^{1d},
 -NR^{1d}R^{1d}, -CF₃, -OCF₃, C₃-C₆ cycloalkyl, and aryl
 25 substituted by 0-3 R^{1c};

R^{1c} is selected at each occurrence from the group:
 methyl, ethyl, Cl, F, Br, I, OH, methoxy, ethoxy, -CN,
 -NO₂, -C(=O)OR^{1d}, NR^{1d}R^{1d}, -CF₃, and -OCF₃;

30

R^{1d} is H, C₁-C₄ alkyl, phenyl or benzyl;

R² is H, C₁-C₄ alkyl, aryl, aryl(C₁-C₄ alkyl)-, or
 C₃-C₆ cycloalkyl;

35

R³ is H, C₁-C₄ alkyl, aryl, aryl(C₁-C₄ alkyl)-, -C(=O)R¹¹,

5 $-\text{CO}_2\text{R}^{11}$, $-\text{C}(=\text{O})\text{NHR}^{11}$, $-\text{S}(=\text{O})\text{R}^{11}$, $-\text{S}(=\text{O})_2\text{R}^{11}$, or
an NH_2 -blocking group;

R^4 and R^5 , are independently selected from: H, C_1 - C_4 alkyl,
aryl(C_1 - C_4 alkyl)-, and C_3 - C_7 cycloalkyl;

10

R^6 is selected from the group: H, $-\text{CO}_2\text{R}^7$, $-\text{NR}^7\text{R}^7$, and C_1 - C_6
alkyl substituted with 0-1 R^{6a} ;

15 R^{6a} is selected from the group: halo, $-\text{NO}_2$, $-\text{CN}$, $-\text{CF}_3$,
 $-\text{CO}_2\text{R}^7$, $-\text{NR}^7\text{R}^7$, $-\text{OR}^7$, $-\text{SR}^7$, $-\text{C}(=\text{NH})\text{NH}_2$, and aryl
substituted with 0-1 R^{6b} ;

R^{6b} is selected from the group: $-\text{CO}_2\text{H}$, $-\text{NH}_2$, $-\text{OH}$, $-\text{SH}$, and
 $-\text{C}(=\text{NH})\text{NH}_2$;

20

R^{6c} is H or C_1 - C_4 alkyl;

R^7 at each occurrence is independently selected from the
group: H, C_1 - C_4 alkyl, aryl, and aryl(C_1 - C_4 alkyl)-,
25 wherein aryl is optionally substituted with 0-3
substituents selected from $-\text{CH}_3$, $-\text{NO}_2$, $-\text{CN}$, $-\text{OH}$,
 $-\text{OCH}_3$, $-\text{SO}_2\text{CH}_3$, $-\text{CF}_3$, Cl, Br, I, and F;

alternatively, $-\text{NR}^7\text{R}^7$ may optionally form a 5-6 membered
30 heterocycle consisting of carbon atoms, a nitrogen
atom, and optionally a second heteroatom selected from
the group: O, S, and N;

R^8 and R^9 are independently selected from H, C_1 - C_4 alkyl,
35 aryl(C_1 - C_4 alkyl)-, and C_3 - C_7 cycloalkyl;

alternatively, NR^8R^9 may form a 5-6 membered heterocycle
consisting of carbon atoms, a nitrogen atom, and

5 optionally a second heteroatom selected from the group: O, S, and N;

R¹¹ is C₁-C₄ alkyl substituted with 0-1 R^{11a},
6-10 membered aryl substituted with 0-2 R^{11b}, or
10 5-10 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; said 5-10 membered heterocyclic ring system is substituted with 0-2
15 R^{11b};

R^{11a} is C₁-C₄ alkyl, halogen, -OR¹⁴, -SR¹⁴, -NR¹⁴R¹⁵, aryl, or a 5-6 membered heterocyclic ring system containing 1, 2 or 3 heteroatoms selected from nitrogen, oxygen
20 and sulfur;

R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH, -OCF₃, Cl, Br, I, F, =O, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ thioalkoxy, aryl, or aryl(C₁-C₄ alkyl)-, wherein
25 aryl is optionally substituted with 0-3 substituents selected from -CH₃, -NO₂, -CN, -OH, -OCH₃, -SO₂CH₃, -CF₃, Cl, Br, I, and F;

R¹² is selected from the group: H;
30 C₁-C₆ alkyl substituted with 0-3 R^{12a};
C₂-C₆ alkenyl substituted with 0-3 R^{12a};
C₂-C₆ alkynyl substituted with 0-3 R^{12a};
C₃-C₇ cycloalkyl substituted with 0-3 R^{12a};
C₄-C₁₀ (cycloalkyl-alkyl) substituted with 0-3 R^{12a};
35 6-10 membered aryl substituted with 0-3 R^{12a}; and
5-10 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; said 5-10 membered

5 heterocyclic ring system is substituted with 0-2
R^{12a};

R^{12a} is independently selected from the group: C₁-C₆ alkoxy;
lower thioalkyl; sulfonyl; -NO₂; halogen; haloalkyl;
10 carboxyl; carboxy(lower alkyl); -OR¹⁴; -SR¹⁴; -NR¹⁴R¹⁵;
-C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵; -S(=O)₂R¹⁴;
C₁-C₆ alkyl substituted with 0-3 R^{12b};
C₂-C₆ alkenyl substituted with 0-3 R^{12b};
C₂-C₆ alkynyl substituted with 0-3 R^{12b};
15 C₃-C₇ cycloalkyl substituted with 0-3 R^{12b};
C₄-C₁₀ (alkylcycloalkyl) substituted with 0-3 R^{12b};
6-10 membered aryl substituted with 0-3 R^{12b}; and
5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
20 group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
R^{12b};

25 R^{12b} is independently selected from the group: C₁-C₆ alkyl;
C₃-C₇ cycloalkyl; C₁-C₆ alkoxy; halogen; -OR¹⁴; -SR¹⁴;
-NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵; -S(=O)₂R¹⁴;
-NO₂; haloalkyl; carboxyl; carboxy(lower alkyl); aryl;
and 5-10 membered heterocyclic ring system consisting
30 of carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with C₁-C₆
alkyl;

35

R¹⁴ and R¹⁵ are independently selected from the group: H,
C₁-C₄ alkyl, aryl, aryl(C₁-C₄ alkyl)-, and C₃-C₇
cycloalkyl;

5 R^{16} is a bond, -O-, -S- or -NR¹⁷-; and

R^{17} is H, C₁-C₄ alkyl, aryl, aryl(C₁-C₄ alkyl)-, or
C₃-C₆ cycloalkyl.

10 3. A compound of Claim 2, or a stereoisomer or a
pharmaceutically acceptable salt form or prodrug thereof,
wherein:

W is -B(Y¹)(Y²);

15

Y¹ and Y² are independently selected from:

- a) -OH,
- b) -F,
- c) C₁-C₈ alkoxy, and

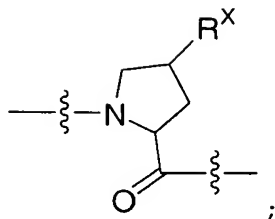
20 when taken together with B, Y¹ and Y² form:

- d) a cyclic boronic ester where said cyclic boronic
ester contains from 2 to 16 carbon atoms, and,
optionally, 1, 2, or 3 heteroatoms which can be N,
S, or O;

25

A is A²-A³, A²-A³-A⁴, A²-A³-A⁴-A⁵, or A²-A³-A⁴-A⁵-A⁶;

A² is Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His,
Hyp, Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr,
30 Trp, Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa,
Gla, Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe),
Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu),
Thr(O^tBu), Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl),
cyclohexylglycine, cyclohexylalanine,
35 cyclopropylglycine, t-butylglycine, phenylglycine,
3,3-diphenylalanine, or



5

A³, A⁴, A⁵, and A⁶ are independently selected from an amino acid residue wherein said amino acid residue, at each occurrence, is independently selected from the group:

10 Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His, Hyp, Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr, Trp, Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa, Gla, Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe), Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu),
 15 Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl), cyclohexylglycine, cyclohexylalanine, cyclopropylglycine, t-butylglycine, phenylglycine, and 3,3-diphenylalanine;

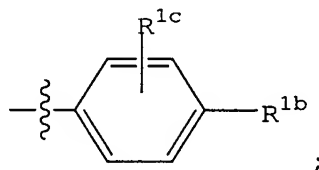
20 R^X is H or -(CH₂)_m-R¹⁶-(CH₂)_n-R¹²;

m and n are independently selected from 0, 1, or 2;

R¹ is -CH₂CH₂-R^{1a}, -CH₂CH₂CH₂CH₂-R^{1a}, or -CH₂CH₂CH₂CH₂CH₂-R^{1a}.

25

R^{1a} is



R^{1b} is selected at each occurrence from the group:

30 H, C₁-C₄ alkyl, F, Cl, Br, I, -OH, C₁-C₄ alkoxy, phenoxy, benzyloxy, -SH, -CN, -NO₂, -C(=O)OR^{1d}, -NR^{1d}R^{1d}, -CF₃, -OCF₃, C₃-C₆ cycloalkyl, and aryl substituted by 0-3 R^{1c};

5

R^{1c} is selected at each occurrence from the group: methyl, ethyl, Cl, F, Br, I, OH, methoxy, ethoxy, -CN, -NO₂, -C(=O)OR^{1d}, NR^{1d}R^{1d}, -CF₃, and -OCF₃;

10 R^{1d} is H, C₁-C₄ alkyl, phenyl or benzyl;

R² is H, C₁-C₄ alkyl, phenyl or benzyl;

15 R³ is H, C₁-C₄ alkyl, aryl, aryl(C₁-C₄ alkyl)-, -C(=O)R¹¹,
-CO₂R¹¹, -C(=O)NHR¹¹, or an NH₂-blocking group;

20 R¹¹ is C₁-C₄ alkyl substituted with 0-1 R^{11a},
6-10 membered aryl substituted with 0-2 R^{11b}, or
5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
R^{11b};

25

R^{11a} is C₁-C₄ alkyl, halogen, -OR¹⁴, -SR¹⁴, -NR¹⁴R¹⁵, aryl,
or a 5-6 membered heterocyclic ring system containing
1, 2 or 3 heteroatoms selected from nitrogen, oxygen
and sulfur;

30

35 R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH,
-OCF₃, Cl, Br, I, F, =O, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-
C₄ thioalkoxy, aryl, or aryl(C₁-C₄ alkyl)-, wherein
aryl is optionally substituted with 0-3 substituents
selected from -CH₃, -NO₂, -CN, -OH, -OCH₃, -SO₂CH₃,
-CF₃, Cl, Br, I, and F;

R¹² is selected from the group: H;
C₁-C₆ alkyl substituted with 0-3 R^{12a};

5 C₂-C₆ alkenyl substituted with 0-3 R^{12a};
 C₂-C₆ alkynyl substituted with 0-3 R^{12a};
 C₃-C₇ cycloalkyl substituted with 0-3 R^{12a};
 C₄-C₁₀ (cycloalkyl-alkyl) substituted with 0-3 R^{12a};
 6-10 membered aryl substituted with 0-3 R^{12a}; and
 10 5-10 membered heterocyclic ring system consisting of
 carbon atoms and 1-4 heteroatoms selected from the
 group: O, S, and N; optionally saturated, partially
 unsaturated or unsaturated; said 5-10 membered
 heterocyclic ring system is substituted with 0-2
 15 R^{12a};

R^{12a} is independently selected from the group: C₁-C₆ alkoxy;
 lower thioalkyl; sulfonyl; -NO₂; halogen; haloalkyl;
 carboxyl; carboxy(lower alkyl); -OR¹⁴; -SR¹⁴; -NR¹⁴R¹⁵;
 20 -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵; -S(=O)₂R¹⁴;
 C₁-C₆ alkyl substituted with 0-3 R^{12b};
 C₂-C₆ alkenyl substituted with 0-3 R^{12b};
 C₂-C₆ alkynyl substituted with 0-3 R^{12b};
 C₃-C₇ cycloalkyl substituted with 0-3 R^{12b};
 25 C₄-C₁₀ (alkylcycloalkyl) substituted with 0-3 R^{12b};
 6-10 membered aryl substituted with 0-3 R^{12b}; and
 5-10 membered heterocyclic ring system consisting of
 carbon atoms and 1-4 heteroatoms selected from the
 group: O, S, and N; optionally saturated, partially
 30 unsaturated or unsaturated; said 5-10 membered
 heterocyclic ring system is substituted with 0-2
 R^{12b};

R^{12b} is independently selected from the group: C₁-C₆ alkyl;
 35 C₃-C₇ cycloalkyl; C₁-C₆ alkoxy; halogen; -OR¹⁴; -SR¹⁴;
 -NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵; -S(=O)₂R¹⁴;
 -NO₂; haloalkyl; carboxyl; carboxy(lower alkyl); and

5 5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with C₁-C₆
10 alkyl;

R¹⁴ and R¹⁵ are independently selected from the group: H,
C₁-C₄ alkyl, aryl, aryl(C₁-C₄ alkyl)-, and C₃-C₇
cycloalkyl;

15

R¹⁶ is a bond, -O-, -S- or -NR¹⁷-; and

R¹⁷ is H, C₁-C₄ alkyl, aryl or aryl(C₁-C₄ alkyl).

20 4. A compound of Claim 3, or a stereoisomer or a
pharmaceutically acceptable salt form or prodrug thereof,
wherein:

W is -B(Y¹)(Y²);

25

Y¹ and Y² are independently selected from:

- a) -OH,
- b) C₁-C₆ alkoxy, or

when taken together with B, Y¹ and Y² form:

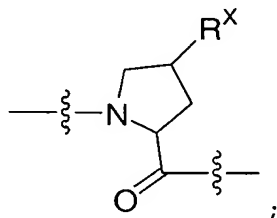
30 d) a cyclic boronic ester where said cyclic boronic
ester contains from 2 to 16 carbon atoms;

A is A²-A³-A⁴, A²-A³-A⁴-A⁵, or A²-A³-A⁴-A⁵-A⁶;

35 A² is Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His,
Hyp, Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr,
Trp, Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa,
Gla, Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe),
Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu),
40 Thr(O^tBu), Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl),

156

5 cyclohexylglycine, cyclohexylalanine,
cyclopropylglycine, t-butylglycine, phenylglycine,
3,3-diphenylalanine, or



10

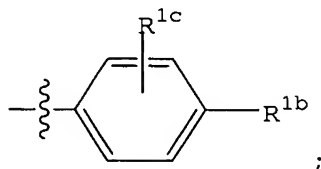
A³, A⁴, A⁵, and A⁶ are independently selected from an amino acid residue wherein said amino acid residue, at each occurrence, is independently selected from the group:
Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His, Hyp,
15 Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr, Trp,
Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa, Gla,
Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe), Glu(OMe),
Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu),
Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl),
20 cyclohexylglycine, cyclohexylalanine,
cyclopropylglycine, t-butylglycine, phenylglycine, and
3,3-diphenylalanine;

R^X is H or -(CH₂)_m-R¹⁶-(CH₂)_n-R¹²;

25

m and n are independently selected from 0, 1, or 2;

R¹ is -CH₂CH₂-R^{1a}, -CH₂CH₂CH₂CH₂-R^{1a}, or -CH₂CH₂CH₂CH₂CH₂-R^{1a}.

30 R^{1a} is

R^{1b} is selected at each occurrence from the group:

- 5 H, C₁-C₄ alkyl, F, Cl, Br, I, -OH, C₁-C₄ alkoxy, phenoxy, benzyloxy, -SH, -CN, -NO₂, -C(=O)OR^{1d}, -NR^{1d}R^{1d}, -CF₃, -OCF₃, C₃-C₆ cycloalkyl, and aryl substituted by 0-3 R^{1c};
- 10 R^{1c} is selected at each occurrence from the group: methyl, ethyl, Cl, F, Br, I, OH, methoxy, ethoxy, -CN, -NO₂, -C(=O)OR^{1d}, NR^{1d}R^{1d}, -CF₃, and -OCF₃;
- R^{1d} is H, C₁-C₄ alkyl, phenyl or benzyl;
- 15 R² is H, methyl, ethyl, propyl, or butyl;
- R³ is H, C₁-C₄ alkyl, aryl, aryl(C₁-C₄ alkyl)-, -C(=O)R¹¹, -CO₂R¹¹, -C(=O)NHR¹¹ or acetyl;
- 20 R¹¹ is C₁-C₄ alkyl substituted with 0-1 R^{11a}, phenyl substituted with 0-2 R^{11b}, or 5-6 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the
- 25 group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; said 5-6 membered heterocyclic ring system is substituted with 0-2 R^{11b};
- 30 R^{11a} is C₁-C₄ alkyl, halogen, -OR¹⁴, -SR¹⁴, -NR¹⁴R¹⁵, phenyl, or a 5-6 membered heterocyclic ring system containing 1, 2 or 3 heteroatoms selected from nitrogen, oxygen and sulfur;
- 35 R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH, -OCF₃, Cl, Br, I, F, =O, methyl, ethyl, propyl, butyl, -OCH₃, -OCH₂CH₃, -SCH₃, -SCH₂CH₃, phenyl, or benzyl;
- R¹² is selected from the group: H;

5 C₁-C₄ alkyl substituted with 0-2 R^{12a};
6-10 membered substituted with 0-3 R^{12a}; and
5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
10 unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
R^{12a};

R^{12a} is independently selected from the group: -NO₂;
15 halogen; haloalkyl; carboxyl; carboxy(lower alkyl);
-OR¹⁴; -SR¹⁴; -NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵;
C₁-C₄ alkyl substituted with 0-2 R^{12b};
phenyl substituted with 0-3 R^{12b}; and
5-6 membered heterocyclic ring system consisting of
20 carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-6 membered
heterocyclic ring system is substituted with 0-2
R^{12b};

25 R^{12b} is independently selected from the group: C₁-C₄ alkyl;
C₃-C₆ cycloalkyl; F; Cl; Br; I; -OR¹⁴; -SR¹⁴;
-NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵; -S(=O)₂R¹⁴;
-NO₂; haloalkyl; carboxyl; carboxy(lower alkyl); and
30 5-6 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-6 membered
heterocyclic ring system is substituted with C₁-C₆
35 alkyl;

R¹⁴ and R¹⁵ are independently selected from the group: H,
C₁-C₄ alkyl, phenyl and benzyl;

5 R^{16} is a bond, -O-, -S- or -NR¹⁷-; and

R^{17} is H, methyl, ethyl, propyl, butyl, phenyl or benzyl.

5. A compound of Claim 4, or a stereoisomer or a
10 pharmaceutically acceptable salt form or prodrug thereof,
wherein:

W is -B(Y¹)(Y²);

15 Y¹ and Y² are independently selected from:

a) -OH,

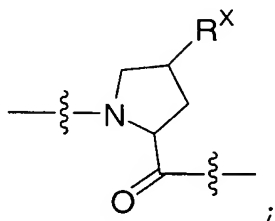
b) C₁-C₆ alkoxy, or

when taken together with B, Y¹ and Y² form:

20 d) a cyclic boronic ester where said cyclic boronic
ester contains from 2 to 14 carbon atoms;

A is A²-A³-A⁴, A²-A³-A⁴-A⁵, or A²-A³-A⁴-A⁵-A⁶;

A² is Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His,
25 Hyp, Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr,
Trp, Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa,
Gla, Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe),
Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu),
Thr(O^tBu), Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl),
30 cyclohexylglycine, cyclohexylalanine,
cyclopropylglycine, t-butylglycine, phenylglycine,
3,3-diphenylalanine, or



160

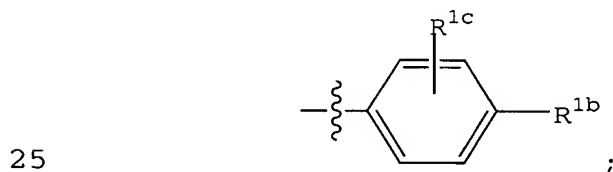
5 A³, A⁴, A⁵, and A⁶ are independently selected from an amino acid residue wherein said amino acid residue, at each occurrence, is independently selected from the group: Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His, Hyp, Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr, Trp, Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa, Gla, Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe), Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu), Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl), cyclohexylglycine, cyclohexylalanine, cyclopropylglycine, t-butylglycine, phenylglycine, and 3,3-diphenylalanine;

R^x is H or $-(CH_2)_m-R^{16}-(CH_2)_n-R^{12}$;

20 m and n are independently selected from 0 or 1;

R¹ is $-CH_2CH_2-R^{1a}$ or $-CH_2CH_2CH_2CH_2-R^{1a}$;

R^{1a} is



R^{1b} is selected at each occurrence from the group:

H, C₁-C₄ alkyl, F, Cl, Br, I, -OH, C₁-C₄ alkoxy, phenoxy, benzyloxy, -SH, -CN, -NO₂, -C(=O)OR^{1d}, -NR^{1d}R^{1d}, -CF₃, -OCF₃, C₃-C₆ cycloalkyl, and aryl substituted by 0-3 R^{1c};

R^{1c} is selected at each occurrence from the methyl, ethyl, Cl, F, Br, I, OH, methoxy, ethoxy, -CN, -NO₂,

35 -C(=O)OR^{1d}, NR^{1d}R^{1d}, -CF₃, and -OCF₃;

R^{1d} is H, methyl, ethyl, propyl, butyl, phenyl or benzyl;

5

R² is H or methyl;

R³ is H, methyl, ethyl, propyl, butyl, phenyl, benzyl,
-C(=O)R¹¹, -CO₂R¹¹, -C(=O)NHR¹¹ or acetyl;

10

R¹¹ is C₁-C₄ alkyl substituted with 0-1 R^{11a},
phenyl substituted with 0-2 R^{11b}, or
5-6 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-6 membered
heterocyclic ring system is substituted with 0-2
R^{11b};

15

20 R^{11a} is methyl, ethyl propyl, butyl, F, Cl, Br, Cl, -OH,
-OCH₃, -SH, -SCH₃, -NH₂, -NHCH₃, -N(CH₃)₂, phenyl, or a
5-6 membered heterocyclic ring system containing 1, 2
or 3 heteroatoms selected from nitrogen, oxygen and
sulfur;

25

R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH,
-OCF₃, Cl, Br, I, F, =O, methyl, ethyl, propyl, butyl,
-OCH₃, -OCH₂CH₃, -SCH₃, -SCH₂CH₃, phenyl, or benzyl;

30 R¹² is selected from the group: H;

C₁-C₄ alkyl substituted with 0-2 R^{12a};

6-10 membered aryl substituted with 0-3 R^{12a}; and

5-10 membered heterocyclic ring system consisting of

carbon atoms and 1-4 heteroatoms selected from the

35 group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
R^{12a};

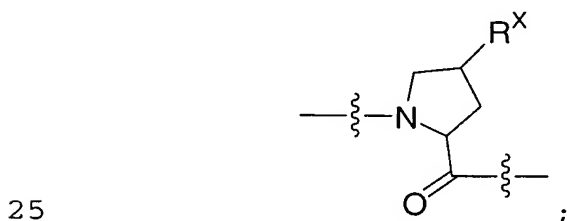
162

- 5 R^{12a} is independently selected from the group: $-NO_2$;
halogen; haloalkyl; carboxyl; carboxy(lower alkyl);
 $-OR^{14}$; $-SR^{14}$; $-NR^{14}R^{15}$; $-C(=O)NR^{14}R^{15}$; $-NR^{14}C(=O)R^{15}$;
 C_1 - C_4 alkyl substituted with 0-3 R^{12b} ;
phenyl substituted with 0-3 R^{12b} ; and
10 5-6 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated;
- 15 R^{12b} is independently selected from the group: C_1 - C_4 alkyl;
 C_3 - C_6 cycloalkyl; F; Cl; Br; I; $-OR^{14}$; $-SR^{14}$;
 $-NR^{14}R^{15}$; $-C(=O)NR^{14}R^{15}$; $-NR^{14}C(=O)R^{15}$; $-S(=O)_2R^{14}$;
 $-NO_2$; haloalkyl; carboxyl; carboxy(lower alkyl); and
5-6 membered heterocyclic ring system consisting of
20 carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated;
- R^{14} and R^{15} are independently selected from the group: H,
25 methyl, ethyl, propyl, butyl, phenyl, and benzyl;
- R^{16} is a bond, $-O-$, $-S-$ or $-NR^{17}-$; and
- R^{17} is H, methyl, ethyl, propyl, butyl, phenyl, or benzyl.
30
6. A compound of Claim 5, or a stereoisomer or a
pharmaceutically acceptable salt form or prodrug thereof,
wherein:
- 35 W is $-B(Y^1)(Y^2)$;
- Y^1 and Y^2 are independently selected from:
a) $-OH$,
b) C_1 - C_6 alkoxy, or
40 when taken together with B, Y^1 and Y^2 form:

5 c) a cyclic boronic ester where said cyclic boronic
 ester is formed from the group: pinanediol,
 pinacol, 1,2-ethanediol, 1,3-propanediol, 1,2-
 propanediol, 2,3-butanediol, 1,2-
 diisopropylethanediol, 5,6-decanediol, 1,2-
 10 dicyclohexylethanediol, diethanolamine, and 1,2-
 diphenyl-1,2-ethanediol;

A is A²-A³-A⁴, A²-A³-A⁴-A⁵, or A²-A³-A⁴-A⁵-A⁶;

15 A² is Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His,
 Hyp, Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr,
 Trp, Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa,
 Gla, Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe),
 Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu),
 20 Thr(O^tBu), Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl),
 cyclohexylglycine, cyclohexylalanine,
 cyclopropylglycine, t-butylglycine, phenylglycine,
 3,3-diphenylalanine, or



A³, A⁴, A⁵, and A⁶ are independently selected from an amino
 acid residue wherein said amino acid residue, at each
 occurrence, is independently selected from the group:
 30 Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His, Hyp,
 Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr, Trp,
 Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa, Gla,
 Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe), Glu(OMe),
 Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu),
 35 Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl),
 cyclohexylglycine, cyclohexylalanine,

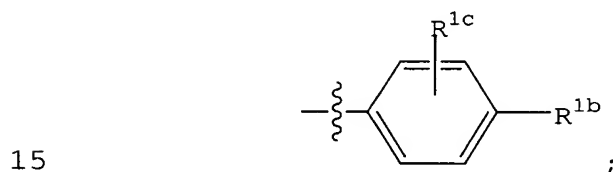
5 cyclopropylglycine, t-butylglycine, phenylglycine, and
3,3-diphenylalanine;

R^X is H, or $-(CH_2)_m-R^{16}-(CH_2)_n-R^{12}$;

10 m and n are independently selected from 0 or 1;

R^1 is $-CH_2CH_2-R^{1a}$ or $-CH_2CH_2CH_2CH_2-R^{1a}$;

R^{1a} is



R^{1b} is selected at each occurrence from the group:

H, C_1 - C_4 alkyl, F, Cl, Br, I, -OH, C_1 - C_4 alkoxy,
phenoxy, benzyloxy, -SH, -CN, -NO₂, -C(=O)OR^{1d},
20 -NR^{1d}R^{1d}, -CF₃, -OCF₃, C_3 - C_6 cycloalkyl, and aryl
substituted by 0-3 R^{1c} ;

R^{1c} is selected at each occurrence from the methyl, ethyl,
Cl, F, Br, I, OH, methoxy, ethoxy, -CN, -NO₂,

25 -C(=O)OR^{1d}, NR^{1d}R^{1d}, -CF₃, and -OCF₃;

R^{1d} is H, methyl, ethyl, propyl, butyl, phenyl or benzyl;

R^2 is H or methyl;

30

R^3 is H, methyl, ethyl, propyl, butyl, phenyl, benzyl,
-C(=O)R¹¹, -CO₂R¹¹, -C(=O)NHR¹¹ or acetyl;

R^{11} is C_1 - C_4 alkyl substituted with 0-1 R^{11a} ,

35 phenyl substituted with 0-2 R^{11b} , or

5 5-6 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-6 membered
heterocyclic ring system is substituted with 0-2
10 R^{11b};

R^{11a} is methyl, ethyl propyl, butyl, F, Cl, Br, Cl, -OH,
-OCH₃, -SH, -SCH₃, -NH₂, -NHCH₃, -N(CH₃)₂, phenyl, or a
5-6 membered heterocyclic ring system containing 1, 2
15 or 3 heteroatoms selected from nitrogen, oxygen and
sulfur;

R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH,
-OCF₃, Cl, Br, I, F, =O, methyl, ethyl, propyl, butyl,
20 -OCH₃, -OCH₂CH₃, -SCH₃, -SCH₂CH₃, phenyl, or benzyl;

R¹² is selected from the group: H;
C₁-C₄ alkyl substituted with 0-2 R^{12a};
6-10 member aryl substituted with 0-3 R^{12a}; and
25 5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
heterocyclic ring system is substituted with 0-2
30 R^{12a};

R^{12a} is independently selected from the group: -NO₂;
halogen; haloalkyl; carboxyl; carboxy(lower alkyl);
-OR¹⁴; -SR¹⁴; -NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵;
35 C₁-C₄ alkyl; phenyl; and
5-6 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated;

5 R¹⁴ and R¹⁵ are independently selected from the group: H, methyl, and ethyl; and

R¹⁶ is a bond, -O- or -S-.

10 7. A compound of Claim 6, or a stereoisomer or a pharmaceutically acceptable salt form or prodrug thereof, wherein:

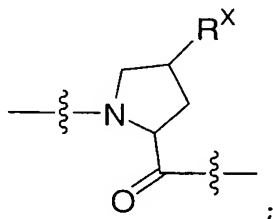
W is pinanediol boronic ester;

15

A is A²-A³-A⁴, A²-A³-A⁴-A⁵, or A²-A³-A⁴-A⁵-A⁶;

A² is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Hyp, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, Val, Abu, Asp(OMe), Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu), Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl), cyclohexylalanine, or

20



25

A³, A⁴, A⁵, and A⁶ are independently selected from an amino acid residue wherein said amino acid residue, at each occurrence, is independently selected from the group: Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Hyp, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, Val, Asp(OMe), Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu), Asp(OBzl), Glu(OBzl), Hyp(OBzl), Thr(OBzl), cyclohexylglycine, cyclohexylalanine, cyclohexylglycine, cyclopropylglycine, t-butylglycine, phenylglycine, and 3,3-diphenylalanine;

30

35

5

R^1 is $-\text{CH}_2\text{CH}_2-\text{R}^{1a}$ or $-\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2-\text{R}^{1a}$;

R^{1a} is selected from the group: phenyl, 2-naphthyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, 4-(1,1'-
10 biphenyl)-, 2,5-dimethylphenyl, 2,4-dimethylphenyl, 3-CF₃-phenyl, 4-CF₃-phenyl, 2-F-phenyl, 3-F-phenyl, 4-F-phenyl, 4-Cl-phenyl, 4-Br-phenyl, 4-phenoxyphenyl, 4-isopropylphenyl, 4-cyclohexylphenyl, 4-tBu-phenyl, 4-methoxyphenyl, 2,6-diF-phenyl, 4-hydroxy-phenyl,
15 (4-methoxyphenoxy)phenyl, methyl, ethyl, propyl, i-propyl, n-butyl, i-butyl, and cyclobutyl;

R^X is H or $-(\text{CH}_2)_m-\text{R}^{16}-(\text{CH}_2)_n-\text{R}^{12}$;

20 m and n are independently selected from 0 or 1;

R^2 is H or methyl;

R^3 is H, methyl, ethyl propyl, butyl, phenyl, benzyl,
25 $-\text{C}(=\text{O})\text{R}^{11}$, $-\text{CO}_2\text{R}^{11}$, $-\text{C}(=\text{O})\text{NHR}^{11}$ or acetyl;

R^{11} is C₁-C₄ alkyl substituted with 0-1 R^{11a} ,
phenyl substituted with 0-2 R^{11b} , or
5-6 membered heterocyclic ring system consisting of
30 carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; said 5-6 membered heterocyclic ring system is substituted with 0-2 R^{11b} ;

35

R^{11a} is methyl, ethyl propyl, butyl, F, Cl, Br, Cl, -OH, -OCH₃, -SH, -SCH₃, -NH₂, -NHCH₃, -N(CH₃)₂, phenyl, or a
5-6 membered heterocyclic ring system containing 1, 2
or 3 heteroatoms selected from nitrogen, oxygen and
40 sulfur;

5

R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH, -OCF₃, Cl, Br, I, F, =O, methyl, ethyl, propyl, butyl, -OCH₃, -OCH₂CH₃, -SCH₃, -SCH₂CH₃, phenyl, or benzyl;

10

R¹² is selected from the group: H;

C₁-C₄ alkyl substituted with 0-2 R^{12a};

6-10 member aryl substituted with 0-3 R^{12a}; and

5-10 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the

15

group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; said 5-10 membered heterocyclic ring system is substituted with 0-2 R^{12a};

20

R^{12a} is independently selected from the group: -NO₂;

halogen; haloalkyl; carboxyl; carboxy(lower alkyl);

-OR¹⁴; -SR¹⁴; -NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵;

C₁-C₄ alkyl; phenyl; and

5-6 membered heterocyclic ring system consisting of

25

carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated;

R¹⁴ and R¹⁵ are independently selected from the group: H,

30

methyl, and ethyl; and

R¹⁶ is a bond, -O- or -S-.

8. A compound of Claim 7, or a stereoisomer or a

35

pharmaceutically acceptable salt form or prodrug thereof, wherein:

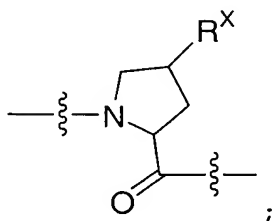
W is pinanediol boronic ester;

40

A is A²-A³-A⁴, A²-A³-A⁴-A⁵, or A²-A³-A⁴-A⁵-A⁶;

5

A² is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Hyp,
 Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, Val,
 Abu, Asp(OMe), Glu(OMe), Hyp(OMe), Asp(O^tBu),
 Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu), Asp(OBzl), Glu(OBzl),
 10 Hyp(OBzl), Thr(OBzl), cyclohexylalanine, or



A³, A⁴, A⁵, and A⁶ are independently selected from an amino
 15 acid residue wherein said amino acid residue, at each
 occurrence, is independently selected from the group:
 Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Hyp, Ile,
 Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, Val,
 Asp(OMe), Glu(OMe), Hyp(OMe), Asp(O^tBu), Glu,
 20 Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu), Asp(OBzl), Glu(OBzl),
 Hyp(OBzl), Thr(OBzl), cyclohexylglycine,
 cyclohexylalanine, cyclohexylglycine,
 cyclopropylglycine, t-butylglycine, phenylglycine, and
 3,3-diphenylalanine;

25

R¹ is -CH₂CH₂-R^{1a} or -CH₂CH₂CH₂CH₂-R^{1a};

R^{1a} is selected from the group: phenyl, 2-naphthyl, 2-
 methylphenyl, 3-methylphenyl, 4-methylphenyl, 4-(1,1'-
 30 biphenyl)-, 2,5-dimethylphenyl, 2,4-dimethylphenyl,
 3-CF₃-phenyl, 4-CF₃-phenyl, 2-F-phenyl, 3-F-phenyl,
 4-F-phenyl, 4-Cl-phenyl, 4-Br-phenyl, 4-phenoxyphenyl,
 4-isopropylphenyl, 4-cyclohexylphenyl, 4-tBu-phenyl,
 4-methoxyphenyl, 2,6-diF-phenyl, 4-hydroxy-phenyl,
 35 (4-methoxyphenoxy)phenyl, methyl, ethyl, propyl,
 i-propyl, n-butyl, i-butyl, and cyclobutyl;

5

R^X is H or benzoxy;

R^2 is H;

10 R^3 is H, $-C(=O)R^{11}$ or acetyl;

R^{11} is 5-6 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; said 5-6 membered heterocyclic ring system is substituted with 0-2 R^{11b} ; and

15 R^{11b} is $-NO_2$, $-NH_2$, $-SO_3H$, $-SO_2CH_3$, $-CO_2H$, $-CF_3$, $-OH$, $-SH$,
 20 $-OCF_3$, Cl, Br, F, methyl, ethyl, propyl, butyl, $-OCH_3$, or $-OCH_2CH_3$.

9. A compound of Claim 7, or a stereoisomer or a pharmaceutically acceptable salt form or prodrug thereof, wherein:

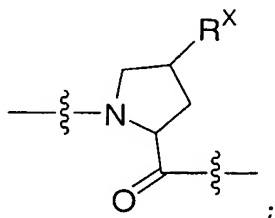
25

W is pinanediol boronic ester;

A is $A^2-A^3-A^4$, $A^2-A^3-A^4-A^5$, or $A^2-A^3-A^4-A^5-A^6$;

30

A^2 is Pro, Leu, Asp, Abu, Val, cyclohexylalanine, or



35 A^3 is Val, Glu, Ile, Thr, cyclohexylglycine, or cyclohexylalanine;

5

A⁴ is Val, Ile, Leu, cyclohexylglycine, cyclopropylglycine, t-butylglycine, phenylglycine, or 3,3-diphenylalanine;

A⁵ is Asp, Glu, Val, Ile, t-butylglycine or Gla;

10

A⁶ is Asp or Glu;

R¹ is -CH₂CH₂-R^{1a} or -CH₂CH₂CH₂CH₂-R^{1a};

15

R^{1a} is selected from the group: phenyl, 2-naphthyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, 4-(1,1'-biphenyl)-, 2,5-dimethylphenyl, 2,4-dimethylphenyl, 3-CF₃-phenyl, 4-CF₃-phenyl, 2-F-phenyl, 3-F-phenyl, 4-F-phenyl, 4-Cl-phenyl, 4-Br-phenyl, 4-phenoxyphenyl, 4-isopropylphenyl, 4-cyclohexylphenyl, 4-tBu-phenyl, 4-methoxyphenyl, 2,6-diF-phenyl, 4-hydroxy-phenyl, (4-methoxyphenoxy)phenyl, methyl, ethyl, propyl, i-propyl, n-butyl, i-butyl, and cyclobutyl;

20

25 R^x is H or -(CH₂)_m-R¹⁶-(CH₂)_n-R¹²;

m and n are independently selected from 0 or 1;

R² is H or methyl;

30

R³ is H, methyl, ethyl propyl, butyl, phenyl, benzyl, -C(=O)R¹¹, -CO₂R¹¹, -C(=O)NHR¹¹ or acetyl;

R¹¹ is C₁-C₄ alkyl substituted with 0-1 R^{11a},

35

phenyl substituted with 0-2 R^{11b}, or 5-6 membered heterocyclic ring system consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; said 5-6 membered

5 heterocyclic ring system is substituted with 0-2
R^{11b};

R^{11a} is methyl, ethyl propyl, butyl, F, Cl, Br, Cl, -OH,
-OCH₃, -SH, -SCH₃, -NH₂, -NHCH₃, -N(CH₃)₂, phenyl, or a
10 5-6 membered heterocyclic ring system containing 1, 2
or 3 heteroatoms selected from nitrogen, oxygen and
sulfur;

R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH,
15 -OCF₃, Cl, Br, I, F, =O, methyl, ethyl, propyl, butyl,
-OCH₃, -OCH₂CH₃, -SCH₃, -SCH₂CH₃, phenyl, or benzyl;

R¹² is selected from the group: H;
C₁-C₄ alkyl substituted with 0-2 R^{12a};
20 6-10 member aryl substituted with 0-3 R^{12a}; and
5-10 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-10 membered
25 heterocyclic ring system is substituted with 0-2
R^{12a};

R^{12a} is independently selected from the group: -NO₂;
halogen; haloalkyl; carboxyl; carboxy(lower alkyl);
30 -OR¹⁴; -SR¹⁴; -NR¹⁴R¹⁵; -C(=O)NR¹⁴R¹⁵; -NR¹⁴C(=O)R¹⁵;
C₁-C₄ alkyl; phenyl; and
5-6 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
35 unsaturated or unsaturated;

R¹⁴ and R¹⁵ are independently selected from H, methyl, or
ethyl; and

40 R¹⁶ is a bond, -O- or -S-.

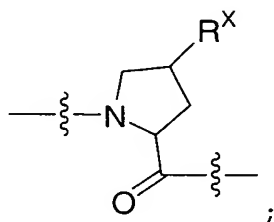
5

10. A compound of Claim 9, or a stereoisomer or a pharmaceutically acceptable salt form or prodrug thereof, wherein:

10 W is pinanediol boronic ester;

A is $A^2-A^3-A^4$, $A^2-A^3-A^4-A^5$, or $A^2-A^3-A^4-A^5-A^6$;

15 A^2 is Pro, Leu, Asp, Abu, Val, cyclohexylalanine, or



A^3 is Val, Glu, Ile, Thr, cyclohexylglycine, or cyclohexylalanine;

20

A^4 is Val, Ile, Leu, cyclohexylglycine, cyclopropylglycine, t-butylglycine, phenylglycine, or 3,3-diphenylalanine;

A^5 is Asp, Glu, Val, Ile, t-butylglycine or Gla;

25

A^6 is Asp or Glu;

R^1 is $-CH_2CH_2-R^{1a}$ or $-CH_2CH_2CH_2CH_2-R^{1a}$;

30 R^{1a} is selected from the group: phenyl, 2-naphthyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, 4-(1,1'-biphenyl)-, 2,5-dimethylphenyl, 2,4-dimethylphenyl, 3-CF₃-phenyl, 4-CF₃-phenyl, 2-F-phenyl, 3-F-phenyl, 4-F-phenyl, 4-Cl-phenyl, 4-Br-phenyl, 4-phenoxyphenyl, 35 4-isopropylphenyl, 4-cyclohexylphenyl, 4-tBu-phenyl, 4-methoxyphenyl, 2,6-diF-phenyl, 4-hydroxy-phenyl,

5 (4-methoxyphenoxy)phenyl, methyl, ethyl, propyl,
i-propyl, n-butyl, i-butyl, and cyclobutyl;

R^x is H or benzoxy;

10 R² is H;

R³ is H, -C(=O)R¹¹ or acetyl;

15 R¹¹ is 5-6 membered heterocyclic ring system consisting of
carbon atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated, partially
unsaturated or unsaturated; said 5-6 membered
heterocyclic ring system is substituted with 0-2 R^{11b};
and

20

R^{11b} is -NO₂, -NH₂, -SO₃H, -SO₂CH₃, -CO₂H, -CF₃, -OH, -SH,
-OCF₃, Cl, Br, F, methyl, ethyl, propyl, butyl, -OCH₃,
or -OCH₂CH₃.

25 11. A compound of Claim 1, or a stereoisomer or a
pharmaceutically acceptable salt form or prodrug
thereof, selected from:

30 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-phenylpropylboronic
acid (+)-pinanediol ester;

H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-4-phenylbutylboronic
acid (+)-pinanediol ester;

35 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-5-phenylpentylboronic
acid (+)-pinanediol ester;

H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(2-
naphthyl)propylboronic acid (+)-pinanediol ester;

40

- 5 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(2-methyl)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(3-methyl)phenylpropylboronic acid (+)-pinanediol ester;
- 10 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(4-methyl)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(1,1'-biphenyl)-4-ylpropylboronic acid (+)-pinanediol ester;
- 15 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(2,5-dimethyl)phenylpropylboronic acid (+)-pinanediol ester;
- 20 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(2,4-dimethyl)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(4-trifluoromethyl)phenylpropylboronic acid (+)-pinanediol ester;
- 25 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(3-trifluoromethyl)phenylpropylboronic acid (+)-pinanediol ester;
- 30 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(4-fluoro)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(4-phenoxy)phenylpropylboronic acid (+)-pinanediol ester;
- 35 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-3-(4-isopropyl)phenylpropylboronic acid (+)-pinanediol ester;

- 5 H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(4-cyclohexyl)phenylpropylboronic acid (+)-pinanediol ester;
- 10 H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(4-*tert*-butyl)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(4-methoxy)phenylpropylboronic acid (+)-pinanediol ester;
- 15 H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(4-chloro)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(4-bromo)phenylpropylboronic acid (+)-pinanediol ester;
- 20 H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(2-fluoro)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(3-fluoro)phenylpropylboronic acid (+)-pinanediol ester;
- 25 H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(2,6-difluoro)phenylpropylboronic acid (+)-pinanediol ester;
- 30 H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-3-(4-hydroxy)phenylpropylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1*R*)-1-aminoheptylboronic acid (+)-pinanediol ester;
- 35 H-Asp-Glu-Val-Val-Pro-(1*R*)-1-amino-5-methylhexylboronic acid (+)-pinanediol ester;
- H-Asp-Glu-Val-Val-Pro-(1*R*)-1-aminoheptylboronic acid (+)-pinanediol ester;
- 40

177

5 H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-4-cyclobutylbutylboronic acid (+)-pinanediol ester; and

H-Asp-Glu-Val-Val-Pro-(1R)-1-amino-5-ethylheptylboronic acid (+)-pinanediol ester.

10

12. A compound of Claim 1 selected from:

Ac-Val-Pro-(1R)-1-amino-3-phenylpropylboronic acid (+)-pinanediol ester;

15

Ac-Val-Pro-(1R)-1-amino-3-(4-trifluoromethyl)phenylpropylboronic acid (+)-pinanediol ester;

Ac-Val-Pro-(1R)-1-amino-3-(4-phenoxy)phenylpropylboronic acid (+)-pinanediol ester;

20

Ac-Val-Pro-(1R)-1-amino-3-(4-hydroxy)phenylpropylboronic acid (+)-pinanediol ester;

Ac-Val-Pro-(1R)-1-amino-3-(4-(4-methoxyphenoxy)phenyl)propylboronic acid (+)-pinanediol ester;

25

Ac-Val-Pro-(1R)-1-amino-3-(4-(4-methylphenoxy)phenyl)propylboronic acid (+)-pinanediol ester; and

30

(2-pyrazinecarbonyl)-Val-Val-Hyp(OBn)-(1R)-1-amino-3-(4-trifluoromethyl)phenylpropylboronic acid (+)-pinanediol ester.

35 13. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of one of Claim 1 or a pharmaceutically acceptable salt form or prodrug thereof.

40 14. A method of treating a viral infection which comprises administering to a host in need of such treatment a

5 therapeutically effective amount of a compound of one of
Claim 1 or a pharmaceutically acceptable salt form or
prodrug thereof.

10 15. A method of treating HCV infection which comprises
administering to a host in need of such treatment a
therapeutically effective amount of a compound of one of
Claim 1 or a pharmaceutically acceptable salt form or
prodrug thereof.